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Potential oral wound healing of topical application of dental gel prepared from *Baccaurea angulata* fruit in diabetic rats (Article)

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Abstract

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Objective: This study investigates the effect of *Baccaurea angulata* fruit extract towards wound healing activity at tooth extractions sites. Significance: High antioxidant content in underutilised *Baccaurea angulata* were expected to open up new possibilities for tooth extraction procedure among diabetic patients. Methods: Sprague dawley rats were divided into 6 groups, and their left mandibular first molar tooth were extracted. The alveolar socket were treated accordingly where group 1, 2, 3, 4, and 5 were diabetic rats (induced using Streptozotocin) applied with plain gel, alveolex, 3%, 5%, and 10% *Baccaurea angulata* extract respectively. Group 6 were non diabetic rats applied with plain gel. On day 4, 7 and 18, rats were euthanized, and the tissue samples were processed for histomorphological analysis. Results: It was found that *Baccaurea angulata* does significantly promotes tooth extraction wound healing in diabetic rats comparable to diabetic group treated with alveolex and non-diabetic rats at early phase of the wound. However the positive effect were not obvious at day 7, while at day 18, groups treated with *Baccaurea angulata* treated group had higher mean scores in most categories although may not statistically significant different. BADG concentration of 4% was found to give the best effects on wound healing. Conclusion: To a certain extent, *Baccaurea angulata* extract does promotes tooth extraction wound healing in diabetic rats. © 2018, Pharmainfo Publications. All rights reserved.

SciVal Topic Prominence

Topic: Propolis | Bees | green propolis

Prominence percentile: 98.177

Reaxys Database Information

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Author keywords

Baccaurea angulat Dental gel Diabetes Extracts Tooth extraction Wound healing

Indexed keywords

EMTREE drug terms: acetylcysteine dental gel herbaceous agent unclassified drug wound healing promoting agent

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acetylcysteine, 616-91-1

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